

CLAIMS

1. An optical information recording medium capable of reproducing information using laser light:

5 having at least a reflective layer and a recording layer, in that order, on a substrate; and the reflective layer being an alloy containing aluminum and nickel.

2. The optical information recording medium according to Claim 1, wherein the reflective layer is an aluminum alloy containing at least 1 atom percent and no more than 10 atom percent nickel.

3. The optical information recording medium according to Claim 2, wherein the reflective layer is an aluminum alloy containing at least 1 atom percent and no more than 5 atom percent nickel.

4. The optical information recording medium according to any of Claims 1 to 3, wherein the reflective layer is formed as a film over the substrate.

5. The optical information recording medium according to any of Claims 1 to 4, wherein the thickness of the reflective layer is at least 20 nm and no more than 300 nm.

6. The optical information recording medium according to any of Claims 1 to 5, further comprising a cover layer, a reflective layer-side dielectric layer disposed between the reflective layer and the recording layer, and an incident light-side dielectric layer disposed between the recording layer and the cover layer.

7. The optical information recording medium according to Claim 6, wherein the reflective layer-side dielectric layer contains sulfur.

8. The optical information recording medium according to Claim 6 or 7, wherein the main component of the reflective layer-side dielectric layer is ZnS or an oxide, the main components of the recording layer are germanium and antimony, or germanium, bismuth, and tellurium, and the main component of the incident light-side dielectric layer is ZnS or an oxide.

9. The optical information recording medium according to any of Claims 6 to 8, wherein the thickness of the reflective layer-side dielectric layer is at least 15 nm and no more than 50 nm, the thickness of the recording layer is at least 5 nm and no more than 15 nm, and the
5 thickness of the incident light-side dielectric layer is at least 10 nm and no more than 100 nm.

10. The optical information recording medium according to any of Claims 6 to 9, wherein the reflective layer-side dielectric layer is in contact with the reflective layer.

10 11. A method for manufacturing an optical information recording medium, including producing at least a reflective layer and a recording layer, in that order, on a substrate, wherein producing a film of the reflective layer involves the use of a sputtering target composed of an alloy containing aluminum and nickel.

15 12. The method for manufacturing an optical information recording medium according to Claim 11, wherein the sputtering target is an aluminum alloy containing at least 1 atom percent and no more than 10 atom percent nickel.

20 13. The method for manufacturing an optical information recording medium according to Claim 12, wherein the sputtering target is an aluminum alloy containing at least 1 atom percent and no more than 5 atom percent nickel.